BEFORE THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION OF THE STATE OF MONTANA

APPLICATION FOR BENEFICIAL	
WATER USE PERMIT NO. 39FJ 30150499	PRELIMINARY DETERMINATION TO
BY DENBURY GREEN PIPELINE –	GRANT TEMPORARY PERMIT
MONTANA, LLC	GRANI IEMPOKAKI PERMII

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On December 8, 2020, Denbury Green Pipeline-Montana, LLC (Applicant) submitted Application for Beneficial Water Use Permit No. 39FJ 30150499 to the Billings Water Resources Office of the Department of Natural Resources and Conservation (Department or DNRC) for 36.84 AF of volume for industrial use (dust abatement and hydrostatic testing). The Department published receipt of the Application on its website. The Application was determined to be correct and complete as of May 10, 2021. Christine Schweigert, Jill Lippard and Mark Elison of the Department met with Rusty Shaw and Bill Atchinson of Denbury and Chad Barnes of SWCA (Consultant), on November 13, 2020. An Environmental Assessment by the Bureau of Land Management for this project was adopted on April 14, 2021.

INFORMATION

The Department considered the following information submitted by the Applicant, which is contained in the administrative record.

Application as filed:

- Application for Beneficial Water Use Permit, Form 600
- Maps: Two undated NAIP aerial images overlain with roads, water sources and land ownership showing proposed points of diversion and places of use.
- Request for variance from measuring requirements included within the application.

 <u>Information Received after Application Filed</u>
- Approval of request for variance from measurement requirements dated January 19, 2021.

- Email chain between DNRC Hydrologist Christine Schweigert and SWCA Consultant Chad Barnes dated May 7, 2021 with renewed Land Use Agreement #1374 from Miles City DNRC office attached.
- Email from SWCA consultants to Christine Schweigert dated May 10, 2021 requesting an interim permit with receipt for the filing fee attached.
- Email chain between DNRC Hydrologist Christine Schweigert and SWCA Consultant Chad Barnes dated May 11, 2021 discussing the proposed place of use.

Information within the Department's Possession/Knowledge

- Letter from Montana Sage Grouse Habitat Conservation Program to Rusty Shaw of Denbury Inc. dated September 26, 2018.
- Environmental Assessment by the Bureau of Land Management Miles City Office titled DOI-BLM-MT-C020-2017-0081-EA Denbury Green Pipeline-Montana, LLC; Denbury Onshore, LLC, dated August 2018.
- DNRC water right records
- DNRC water right file for previous temporary permit on the same sources no. NA 39FJ 30147316.
- DNRC Technical Report dated May 10, 2021
- USGS stream gaging information for gage no. 06334630 Box Elder Creek at Webster,
 MT.
- USGS Monthly Water Balance Model Futures Portal
- USGS StreamStats Montana
- Weather station information from Baker, Montana station
- GIS layer of Denbury proposed pipeline place of use for hydrostatic testing received during processing of permit application nos. 39E 30118309 and 39E 30145887.
- DNRC Technical Memorandum: Estimation of Runoff Volumes for Ephemeral Drainages in Eastern Montana; October 7, 2019.

The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, MCA). **NOTE:** Department or DNRC means the Department of Natural Resources & Conservation; CFS means cubic feet per second; GPM means gallons per minute; AF means acre-feet; AC means acres; AF/YR means acre-feet per year; and POD means point of diversion.

PROPOSED APPROPRIATION

FINDINGS OF FACT

1. The Applicant proposes to divert water from UT Buffalo Creek, by means of two existing dams, from January 1 through December 31 up to 36.84 AF, from two points of diversion located in the SENENE and SENENW Sec. 16, T6N, R60E Fallon County, for industrial use (dust abatement and hydrostatic testing) from June 15 through December 31. The period of diversion listed here is different than what was shown in the Technical Report because it was changed to year-round. The dam will not be removed between periods of use. The place of use for dust abatement is shown in Table 1, the place of use for hydrostatic testing is shown in Table 2:

Table 1. Places of use for dust abatement

Township, Range, Section	Quarter Section	Township, Range, Section	Quarter Section	Township, Range, Section	Quarter Section
5 N 59 E 1	E2E2	6 N 60 E 19	ALL	7 N 60 E 23	SESE
5 N 60 E 6	W2W2	6 N 60 E 2	ALL	7 N 60 E 25	ALL
6 N 59 E 36	SESE	6 N 60 E 20	NWNW	7 N 60 E 26	ALL
6 N 60 E 1	W2NW	6 N 60 E 3	ALL	7 N 60 E 34	S2
6 N 60 E 10	NWNW	6 N 60 E 30	E2W2	7 N 60 E 35	ALL
6 N 60 E 16	N2N2	6 N 60 E 31	W2	7 N 60 E 36	ALL
6 N 60 E 17	ALL	6 N 60 E 4	N2SE	7 N 61 E 30	W2SW
6 N 60 E 18	SESE	6 N 60 E 9	ALL	7 N 61 E 31	ALL

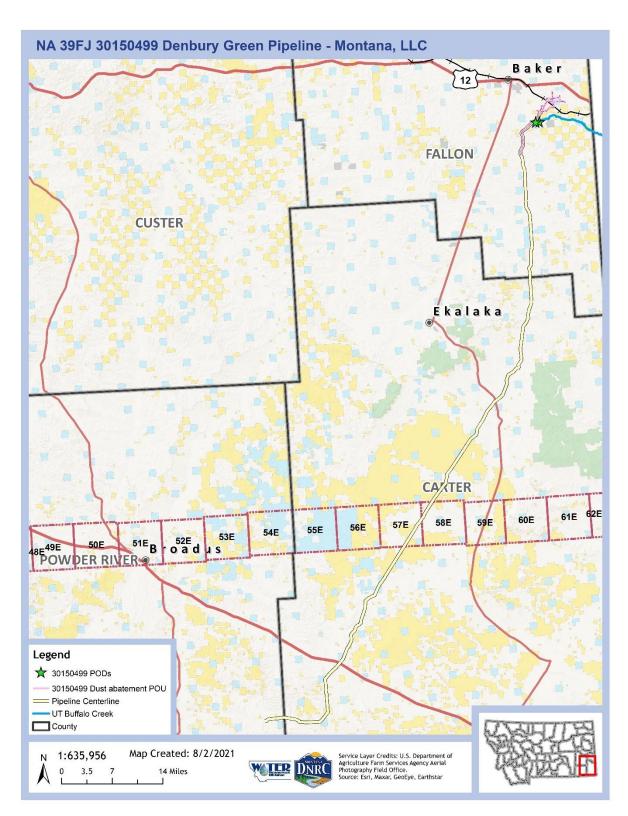
Table 2. Places of use for hydrostatic testing

Township, Range, Section	Quarter Section	Township, Range, Section	Quarter Section	Township, Range, Section	Quarter Section
6 N 60 E 3	SW	1 N 60 E 31	E2SE	5 S 57 E 9	ALL

6 N 60 E 10	NWNW	1 S 60 E 4	ALL	5 S 57 E 8	SESE
6 N 60 E 9	ALL	1 S 60 E 5	S2	5 S 57 E 17	ALL
6 N 60 E 16	N2NW	1 S 60 E 8	W2	5 S 57 E 20	W2NW
6 N 60 E 17	ALL	1 S 60 E 7	E2SE	5 S 57 E 19	E2
6 N 60 E 20	NWNW	1 S 60 E 18	E2	5 S 57 E 30	ALL
6 N 60 E 19	ALL	1 S 60 E 19	ALL	5 S 56 E 25	E2
6 N 60 E 30	E2W2	1 S 59 E 24	SESE	5 S 56 E 36	ALL
6 N 60 E 31	W2	1 S 59 E 25	ALL	5 S 56 E 35	SESE
5 N 60 E 6	W2W2	1 S 59 E 26	SE	6 S 57 E 5	N2
5 N 60 E 7	W2W2	1 S 59 E 35	ALL	6 S 57 E 6	ALL
5 N 60 E 18	W2	1 S 59 E 34	SESE	6 S 57 E 7	W2
5 N 60 E 19	E2W2	2 S 59 E 2	W2	6 S 57 E 18	W2NW
5 N 60 E 30	E2W2	2 S 59 E 3	E2	6 S 56 E 13	E2
5 N 60 E 31	E2W2	2 S 59 E 10	ALL	6 S 56 E 24	ALL
4 N 60 E 3	W2E2	2 S 59 E 9	SESE	6 S 56 E 25	NW
4 N 60 E 10	W2E2	2 S 59 E 16	ALL	6 S 56 E 26	ALL
4 N 60 E 15	E2	2 S 59 E 21	N2NW	6 S 56 E 35	W2
4 N 60 E 23	W2W2	2 S 59 E 20	ALL	7 S 56 E 2	W2W2
4 N 60 E 22	E2NE	2 S 59 E 29	W2	7 S 56 E 3	E2
4 N 60 E 26	W2W2	2 S 59 E 30	S2	7 S 56 E 10	ALL
4 N 60 E 35	W2W2	2 S 58 E 36	E2	7 S 56 E 15	NWNW
3 N 60 E 2	W2W2	3 S 58 E 1	ALL	7 S 56 E 16	E2
3 N 60 E 11	W2W2	3 S 58 E 2	E2SE	7 S 56 E 21	ALL
3 N 60 E 14	NWNW	3 S 58 E 11	ALL	7 S 56 E 20	SE
3 N 60 E 15	E2E2	3 S 58 E 14	NWNW	7 S 56 E 29	N2
3 N 60 E 22	E2	3 S 58 E 15	E2	7 S 56 E 30	ALL
3 N 60 E 27	ALL	3 S 58 E 22	ALL	7 S 56 E 31	W2
3 N 60 E 34	E2W2	3 S 58 E 27	NWNW	8 S 56 E 6	W2W2
2 N 60 E 3	W2W2	3 S 58 E 28	ALL	8 S 56 E 7	W2W2
2 N 60 E 4	E2SE	3 S 58 E 33	NW	8 S 56 E 18	W2W2
2 N 60 E 10	W2W2	3 S 58 E 32	E2	8 S 56 E 19	W2W2
2 N 60 E 15	W2W2	4 S 58 E 5	ALL	8 S 56 E 30	NWNW
2 N 60 E 22	W2W2	4 S 58 E 6	E2SE	8 S 55 E 25	ALL
2 N 60 E 21	SESE	4 S 58 E 7	ALL	8 S 55 E 29	S2S2
2 N 60 E 28	E2	4 S 57 E 13	ALL	8 S 55 E 30	S2
2 N 60 E 33	ALL	4 S 58 E 18	NWNW	8 S 54 E 25	ALL
1 N 60 E 4	NW	4 S 57 E 24	W2	8 S 54 E 26	N2S2

1 N 60 E 5	E2	4 S 57 E 23	SE	8 S 54 E 27	S2
1 N 60 E 8	ALL	4 S 57 E 26	ALL	8 S 55 E 36	NW
1 N 60 E 17	E2W2	4 S 57 E 35	NWNW	8 S 55 E 35	S2N2
1 N 60 E 20	W2	4 S 57 E 34	ALL	8 S 55 E 34	S2N2
1 N 60 E 29	W2W2	5 S 57 E 3	NW	8 S 55 E 33	N2
1 N 60 E 32	W2W2	5 S 57 E 4	E2	8 S 55 E 32	NENE

- 2. The proposed use is temporary ending on December 31, 2024.
- 3. The place of use is generally located in Powder River, Carter and Fallon Counties.



§ 85-2-311, MCA, BENEFICIAL WATER USE PERMIT CRITERIA

GENERAL CONCLUSIONS OF LAW

- 4. The Montana Constitution expressly recognizes in relevant part that:
 - (1) All existing rights to the use of any waters for any useful or beneficial purpose are hereby recognized and confirmed.
 - (2) The use of all water that is now or may hereafter be appropriated for sale, rent, distribution, or other beneficial use . . . shall be held to be a public use.
 - (3) All surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided by law.

Mont. Const. Art. IX, §3. While the Montana Constitution recognizes the need to protect senior appropriators, it also recognizes a policy to promote the development and use of the waters of the state by the public. This policy is further expressly recognized in the water policy adopted by the Legislature codified at § 85-2-102, MCA, which states in relevant part:

- (1) Pursuant to Article IX of the Montana constitution, the legislature declares that any use of water is a public use and that the waters within the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided in this chapter. . . .
- (3) It is the policy of this state and a purpose of this chapter to encourage the wise use of the state's water resources by making them available for appropriation consistent with this chapter and to provide for the wise utilization, development, and conservation of the waters of the state for the maximum benefit of its people with the least possible degradation of the natural aquatic ecosystems. In pursuit of this policy, the state encourages the development of facilities that store and conserve waters for beneficial use, for the maximization of the use of those waters in Montana . . .
- 5. Pursuant to § 85-2-302(1), MCA, except as provided in §§ 85-2-306 and 85-2-369, MCA, a person may not appropriate water or commence construction of diversion, impoundment, withdrawal, or related distribution works except by applying for and receiving a permit from the Department. See § 85-2-102(1), MCA. An applicant in a beneficial water use permit proceeding must affirmatively prove all of the applicable criteria in § 85-2-311, MCA. Section § 85-2-311(1) states in relevant part:

- ... the department shall issue a permit if the applicant proves by a preponderance of evidence that the following criteria are met:
- (a) (i) there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate; and
- (ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:
 - (A) identification of physical water availability;
- (B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and
- (C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.
- (b) the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. In this subsection (1)(b), adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied;
- (c) the proposed means of diversion, construction, and operation of the appropriation works are adequate;
 - (d) the proposed use of water is a beneficial use;
- (e) the applicant has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water under the permit:
 - (f) the water quality of a prior appropriator will not be adversely affected;
- (g) the proposed use will be substantially in accordance with the classification of water set for the source of supply pursuant to <u>75-5-301(1)</u>; and
- (h) the ability of a discharge permit holder to satisfy effluent limitations of a permit issued in accordance with Title 75, chapter 5, part 4, will not be adversely affected.
- (2) The applicant is required to prove that the criteria in subsections (1)(f) through (1)(h) have been met only if a valid objection is filed. A valid objection must contain substantial credible information establishing to the satisfaction of the department that the criteria in subsection (1)(f), (1)(g), or (1)(h), as applicable, may not be met. For the criteria set forth in subsection (1)(g), only the department of environmental quality or a local water quality district established under Title 7, chapter 13, part 45, may file a valid objection.

To meet the preponderance of evidence standard, "the applicant, in addition to other evidence demonstrating that the criteria of subsection (1) have been met, shall submit hydrologic or other evidence, including but not limited to water supply data, field reports, and other information developed by the applicant, the department, the U.S. geological survey, or the U.S. natural resources conservation service and other specific field studies." § 85-2-311(5), MCA (emphasis added). The determination of whether an application has satisfied the § 85-2-311, MCA criteria is committed to the discretion of the Department. Bostwick Properties, Inc. v. Montana Dept. of Natural Resources and Conservation, 2009 MT 181, ¶ 21. The Department is required grant a permit only if the § 85-2-311, MCA, criteria are proven by the applicant by a preponderance of the evidence. Id. A preponderance of evidence is "more probably than not." Hohenlohe v. DNRC, 2010 MT 203, ¶¶33, 35.

- 6. Pursuant to § 85-2-312, MCA, the Department may condition permits as it deems necessary to meet the statutory criteria:
 - (1) (a) The department may issue a permit for less than the amount of water requested, but may not issue a permit for more water than is requested or than can be beneficially used without waste for the purpose stated in the application. The department may require modification of plans and specifications for the appropriation or related diversion or construction. The department may issue a permit subject to terms, conditions, restrictions, and limitations it considers necessary to satisfy the criteria listed in 85-2-311 and subject to subsection (1)(b), and it may issue temporary or seasonal permits. A permit must be issued subject to existing rights and any final determination of those rights made under this chapter.
- E.g., Montana Power Co. v. Carey (1984), 211 Mont. 91, 96, 685 P.2d 336, 339 (requirement to grant applications as applied for, would result in, "uncontrolled development of a valuable natural resource" which "contradicts the spirit and purpose underlying the Water Use Act."); see also, In the Matter of Application for Beneficial Water Use Permit No. 65779-76M by Barbara L. Sowers (DNRC Final Order 1988)(conditions in stipulations may be included if it further compliance with statutory criteria); In the Matter of Application for Beneficial Water Use Permit No. 42M-80600 and Application for Change of Appropriation Water Right No. 42M-036242 by Donald H. Wyrick (DNRC Final Order 1994); Admin. R. Mont. (ARM) 36.12.207.

7. The Montana Supreme Court further recognized in Matter of Beneficial Water Use Permit Numbers 66459-76L, Ciotti: 64988-G76L, Starner (1996), 278 Mont. 50, 60-61, 923 P.2d 1073, 1079, 1080, superseded by legislation on another issue:

Nothing in that section [85-2-313], however, relieves an applicant of his burden to meet the statutory requirements of § 85-2-311, MCA, before DNRC may issue that provisional permit. Instead of resolving doubts in favor of appropriation, the Montana Water Use Act requires an applicant to make explicit statutory showings that there are unappropriated waters in the source of supply, that the water rights of a prior appropriator will not be adversely affected, and that the proposed use will not unreasonably interfere with a planned use for which water has been reserved.

See also, Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court,

Memorandum and Order (2011). The Supreme Court likewise explained that:

.... unambiguous language of the legislature promotes the understanding that the Water Use Act was designed to protect senior water rights holders from encroachment by junior appropriators adversely affecting those senior rights.

Montana Power Co., 211 Mont. at 97-98, 685 P.2d at 340; see also Mont. Const. art. IX §3(1).

- 8. An appropriation, diversion, impoundment, use, restraint, or attempted appropriation, diversion, impoundment, use, or restraint contrary to the provisions of § 85-2-311, MCA is invalid. An officer, agent, agency, or employee of the state may not knowingly permit, aid, or assist in any manner an unauthorized appropriation, diversion, impoundment, use, or other restraint. A person or corporation may not, directly or indirectly, personally or through an agent, officer, or employee, attempt to appropriate, divert, impound, use, or otherwise restrain or control waters within the boundaries of this state except in accordance with this § 85-2-311, MCA. § 85-2-311(6), MCA.
- 9. The Department may take notice of judicially cognizable facts and generally recognized technical or scientific facts within the Department's specialized knowledge, as specifically identified in this document. ARM 36.12.221(4).

Physical Availability FINDINGS OF FACT

- 10. UT Buffalo Creek is a non-perennial stream according to USGS quadrangle mapping. The Applicant requested and received a variance from the water measurement requirements in ARM 36.12.1702 because of the ephemeral character of the source and their statement that a flow measurement was not possible due to periodic no flow conditions. DNRC used the USGS Monthly Water Balance Model Futures Portal (MWBM) described in USGS Open-file Report 2016-1212, StreamStats of Montana online application and the USGS gaging station records for USGS 06334630 Box Elder Creek at Webster, MT to estimate monthly and annual flow rate and volume for the proposed point of diversion.
- 11. The MWBM is a refined version of the Thornthwaite program and uses regional calibration rather than national calibration. This method is the best available method for estimating annual runoff from non-perennial streams in relatively small watersheds of eastern Montana.
- 12. The MWBM uses regional hydrologic and climate data specific to geographic points to model runoff events. The model returns total annual runoff in millimeters (mm) which is then converted to inches (multiplied by 0.03937) and multiplied by the basin area in acres to determine annual runoff in AF/YR. The two reservoirs proposed for use in this Application are approximately a half a mile apart, when the upper reservoir fills it spills and fills the lower reservoir. Because of the close proximity and direct connection, the Department analyzed the availability of water at the lower dam. The drainage basin above the PODs is approximately 0.9 sq. miles (576 ac.) based on mapping in the USGS StreamStats Montana program. The average annual runoff over the period from 1952-2000 based on the Baker, Montana climate station is 0.163643177 inches. The average annual runoff in inches was multiplied by 0.9 sq. mi. and by 640 acres per sq. mi. to arrive at a mean annual runoff above the lower proposed POD of 94.26 AF. The total volume was divided by 1.98 and by 365 to estimate the mean annual flow rate at 0.13 CFS at the lower reservoir.

Table 3. USGS Monthly Water Balance Model Futures Portal output at proposed points of diversion

Month	Average Annual	Average Annual	AF/Month (in. x 0.9
	Precipitation (mm.)	Precipitation (in.)	sq. mi. x 640 ac./sq.
			mi.)

January	0.176549815	0.006950784	4.003651506
February	0.263341852	0.010367795	5.971849944
March	0.634577778	0.024983391	14.39043297
April	0.481186111	0.018944345	10.9119429
May	0.568453148	0.022380057	12.890913
June	0.597715556	0.023532121	13.55450181
July	0.305993333	0.012046988	6.939065164
August	0.297931481	0.011729592	6.756245118
September	0.375628148	0.014788518	8.518186227
October	0.356373704	0.014030468	8.081549771
November	0.076258704	0.003002313	1.729332167
December	0.022524815	0.000886804	0.510799226
Annual	4.156534444	0.163643177	94.2584698

13. The Dept. then took the mean monthly flow at the Boxelder Creek gage (which is the nearest gaged source in a similar basin) and divided it by the mean annual flow to determine the percent of mean annual flow for each month. DNRC then multiplied the predicted mean annual flow on Buffalo Creek (0.13 CFS) by the monthly percent of mean annual for Boxelder Creek to estimate the monthly flow on UT Buffalo Creek. The flow rate was multiplied by the number of days each month and by 1.98 to calculate the monthly volume at the proposed POD.

Table 4. Predi	icted monthly flow rate and volume at the proposed PODs on UT Buffalo Creek					
		Percent				
		of Mean				
		Annual				
		at				
		Boxelder				
		Creek	Predicted			
		gage	flow on			
	Mean	(monthly	UT			
	Monthly	mean	Buffalo	Predicted	Predicted	
	Flow at	divided	Creek	flow on UT	Volume on UT	
	Boxelder	by mean	(CFS)	Buffalo	Buffalo Creek	
	Creek	annual	(0.13	Creek	(\mathbf{AF})	
	Gage	(90.55	CFS*mo.	(GPM)	(CFS*1.98*no.	No.
Month	(CFS)	CFS))	%)	(CFS*448.8)	days)	Days/Mo.
January	4.2	4.64%	0.01	2.71	0.37	31
February	63	69.57%	0.09	40.59	5.01	28
March	249	274.98%	0.36	160.43	21.94	31
April	215	237.43%	0.31	138.53	18.33	30
May	222	245.16%	0.32	143.04	19.56	31
June	199	219.76%	0.29	128.22	16.97	30
		217.7070	0.29	120.22	10.97	50
July	44	48.59%	0.29	28.35	3.88	31
July August	44 15					
•		48.59%	0.06	28.35	3.88	31
August	15	48.59% 16.57%	0.06 0.02	28.35 9.67	3.88 1.32	31 31
August September	15 20	48.59% 16.57% 22.09%	0.06 0.02 0.03	28.35 9.67 12.89	3.88 1.32 1.71	31 31 30
August September October	15 20 42	48.59% 16.57% 22.09% 46.38%	0.06 0.02 0.03 0.06	28.35 9.67 12.89 27.06	3.88 1.32 1.71 3.70	31 31 30 31

- The Applicants are proposing to use 36.84 AF of water from June 15 to December 31. The predicted physically available flow rate and volume of water in the UT Buffalo Creek drainage basin above the proposed point of diversion is a peak of 0.36 CFS and a total of 94.26 AF/YR.
- While ARM 36.12.1702 requires estimates of monthly flows, in this case (because the diversions are on stream dams), the annual volume is the appropriate measure of availability. There are no legal demands above these reservoirs therefore no adjustment needs to be made to the physical availability analysis based on upstream appropriations.

16. The MWBM model is an accepted method for determining annual runoff from non-perennial streams in eastern MT. The distribution of flow based on percent of mean at a similar gaged source is an accepted method for estimating monthly distribution of flow. This UT Buffalo Creek is within the Little Beaver Creek drainage basin which has similar basin characteristics to the Boxelder Creek basin. The Boxelder Creek gage is the nearest gage in a similar drainage basin.

CONCLUSIONS OF LAW

- 17. Pursuant to § 85-2-311(1)(a)(i), MCA, an applicant must prove by a preponderance of the evidence that "there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate."
- 18. It is the applicant's burden to produce the required evidence. *In the Matter of Application for Beneficial Water Use Permit No. 27665-411 by Anson* (DNRC Final Order 1987)(applicant produced no flow measurements or any other information to show the availability of water; permit denied); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005).
- 19. An applicant must prove that at least in some years there is water physically available at the point of diversion in the amount the applicant seeks to appropriate. *In the Matter of Application for Beneficial Water Use Permit No.* 72662s76G by John Fee and Don Carlson (DNRC Final Order 1990); *In the Matter of Application for Beneficial Water Use Permit No.* 85184s76F by Wills Cattle Co. and Ed McLean (DNRC Final Order 1994).
- 20. The Applicant has proven that water is physically available at the proposed point of diversion in the amount Applicant seeks to appropriate. § 85-2-311(1)(a)(i), MCA. (FOF 10-16)

Legal Availability:

FINDINGS OF FACT

21. The area of potential impact for this application is approximately 0.7 miles downstream to the mouth of UT Buffalo Creek at Buffalo Creek. This area includes the entire length of UT Buffalo Creek below the POD. The confluence of UT Buffalo Creek and Buffalo Creek is a well-defined hydrologic boundary, both streams are intermittent with limited connectivity and

are not viable contributors to the next named source. The area of affect includes two tributaries which contribute runoff from an additional 1.8 sq. miles or two times the drainage area above the proposed PODs.

- 22. There are two existing legal demands within the area of potential impact. Statement of Claim 39FJ 112135-00 is for stock use from the upper reservoir with a total of 525 animal units claimed. Assuming a volume of 30 gallons per day per animal unit, the stock use from the reservoir would be 17.6 AF per year. Statement of Claim 39FJ 112136-00 is for stock use from the lower reservoir with a total of 525 animal units claimed. Assuming a volume of 30 gallons per day per animal unit, the stock use from the reservoir would be 17.6 AF per year. Both rights are on the same parcel of State of Montana Trust Land and in combination are assigned a total stock use of 17.6 AF.
- 23. Existing physical availability calculated on the source at the dam for the lower reservoir is calculated to be 94.3 AF per year. Subtracting the 17.6 AF of stock use for the existing legal demands leaves 76.7 AF of water legally available for the proposed use. The total new proposed use is 36.8 AF. The Department determines that water is legally available in the amount the Applicant proposes to appropriate.

- 24. Pursuant to § 85-2-311(1)(a), MCA, an applicant must prove by a preponderance of the evidence that:
- (ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:
 - (A) identification of physical water availability;
- (B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and
- (C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.
- <u>E.g.</u>, ARM 36.12.101 and 36.12.120; <u>Montana Power Co.</u>, 211 Mont. 91, 685 P.2d 336 (Permit granted to include only early irrigation season because no water legally available in late

irrigation season); In the Matter of Application for Beneficial Water Use Permit No. 81705-g76F by Hanson (DNRC Final Order 1992).

- 25. It is the applicant's burden to present evidence to prove water can be reasonably considered legally available. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, Order Affirming DNRC Decision, (2011) Pg. 7 (the legislature set out the criteria (§ 85-2-311, MCA) and placed the burden of proof squarely on the applicant. The Supreme Court has instructed that those burdens are exacting.); see also Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054 (burden of proof on applicant in a change proceeding to prove required criteria); In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC., (DNRC Final Order 2005))(it is the applicant's burden to produce the required evidence.); In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions, LLC (DNRC Final Order 2007)(permit denied for failure to prove legal availability); see also ARM 36.12.1705.
- 26. Applicant has proven by a preponderance of the evidence that water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the Department and other evidence provided to the Department. § 85-2-311(1)(a)(ii), MCA. (FOF 21-23)

Adverse Effect

FINDINGS OF FACT

27. The dams are existing and owned by another appropriator and therefore cannot be altered by this applicant if a call is made. The Applicants are using pumps which can be shut down any time call is made. Shutting down the pumps would completely eliminate the diversion associated with this appropriation. The Applicant proposes to monitor all water withdrawals and uses during the project activities to ensure compliance with permits, additionally, the Applicant has land access agreements in place with landowners in the project area that allow the landowners to stop Denbury from withdrawing water if low water levels start impacting existing uses.

- 28. The Applicant proposes to find alternate sources of water such as temporary changes or purchase of municipal water if water supply is insufficient to meet existing legal demands.
- 29. The Applicant has a land use license from the State of Montana Trust Land Management Division allowing them to use up to 6 million gallons from each reservoir.
- 30. The predicted amount of water physically and legally available at the proposed point of diversion exceeds the amount requested in this application for all months in the proposed period of diversion.

- 31. Pursuant to § 85-2-311(1)(b), MCA, the Applicant bears the affirmative burden of proving by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. Analysis of adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied. See Montana Power Co. (1984), 211 Mont. 91, 685 P.2d 336 (purpose of the Water Use Act is to protect senior appropriators from encroachment by junior users); Bostwick Properties, Inc. ¶ 21.
- 32. An applicant must analyze the full area of potential impact under the § 85-2-311, MCA criteria. *In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company* (DNRC Final Order 2006). While § 85-2-361, MCA, limits the boundaries expressly required for compliance with the hydrogeologic assessment requirement, an applicant is required to analyze the full area of potential impact for adverse effect in addition to the requirement of a hydrogeologic assessment. Id. ARM 36.12.120(5).
- 33. Applicant must prove that no prior appropriator will be adversely affected, not just the objectors. <u>Sitz Ranch v. DNRC</u>, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 4.
- 34. In analyzing adverse effect to other appropriators, an applicant may use the water rights claims of potentially affected appropriators as evidence of their "historic beneficial use." See

- Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054.
- 35. It is the applicant's burden to produce the required evidence. <u>E.g.</u>, <u>Sitz Ranch v. DNRC</u>, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7 (legislature has placed the burden of proof squarely on the applicant); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005). (DNRC Final Order 2005). The Department is required to grant a permit only if the § 85-2-311, MCA, criteria are proven by the applicant by a preponderance of the evidence. <u>Bostwick Properties, Inc.</u> ¶ 21.
- 36. Section 85-2-311 (1)(b) of the Water Use Act does not contemplate a de minimis level of adverse effect on prior appropriators. Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pg. 8.
- 37. Adverse effect not required to be measurable but must be calculable. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, Order Affirming DNRC Decision, (2011) Pg. 7 (DNRC permit denial affirmed; 3 gpm and 9 gpm depletion to surface water not addressed in legal availability or mitigation plan.); Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court, Memorandum and Order, (2011) Pg. 12 ("DNRC properly determined that Wesmont cannot be authorized to divert, either directly or indirectly, 205.09 acre-feet from the Bitterroot River without establishing that the water does not belong to a senior appropriator"; applicant failed to analyze legal availability of surface water where projected depletion from groundwater pumping); In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company (DNRC Final Order 2006); see also Robert and Marlene Tackle v. DNRC et al., Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, Opinion and Order (June 23, 1994). Artesian pressure is not protectable and a reduction by a junior appropriator is not considered an adverse effect. See In re Application No. 72948-G76L by Cross, (DNRC Final Order 1991); see also In re Application No. 75997-G76L by Carr, (DNRC Final Order 1991).

38. The Applicant has proven by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. § 85-2-311(1)(b), MCA. (FOF 27-30)

Adequate Diversion

FINDINGS OF FACT

- 39. The dams are in place and have been since 1952 and 1957. No changes to the reservoirs are proposed. The upper reservoir does not have an estimated capacity in the water right record. Based on GIS mapping using aerial imagery and a USGS topographic map, the surface area of the reservoir is 9.01 acres. The max depth of 8 ft. was estimated using the Buffalo Reservoir, Montana 7.5-minute topographic map with 10 ft. contour intervals. The estimated capacity of the reservoir is 28.83 AF (9.01 * 8 * 0.4 (slope factor) = 28.83). The lower reservoir an estimated capacity of 69.80 AF in the record. The reservoir surface area is 17.45 feet, dam height is 13 feet, and max depth is 10 feet.
- 40. Secondary diversions from the reservoirs will be used to achieve the beneficial use. Water for dust abatement will be diverted from the existing reservoirs by contracted water tank trucks. Typically, water trucks divert at a flow rate up to 300 GPM. Water for hydrostatic testing will be conveyed to the pipeline via water hose at a rate to be determined by pipeline engineers familiar with hydrostatic testing. All water diversions will be measured, and contractors will be required to maintain water gauges on each pump. Water use logs will be maintained to document specific water quantities withdrawn at the PODs.

- 41. Pursuant to § 85-2-311(1)(c), MCA, an Applicant must demonstrate that the proposed means of diversion, construction, and operation of the appropriation works are adequate.
- 42. The adequate means of diversion statutory test merely codifies and encapsulates the case law notion of appropriation to the effect that the means of diversion must be reasonably effective, i.e., must not result in a waste of the resource. *In the Matter of Application for Beneficial Water Use Permit No. 33983s41Q by Hoyt* (DNRC Final Order 1981); § 85-2-312(1)(a), MCA.

- 43. Whether party presently has easement not relevant to determination of adequate means of diversion. *In the Matter of Application to Change a Water Right No. G129039-76D by Keim/Krueger* (DNRC Final Order 1989).
- 44. Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. § 85-2-311(1)(c), MCA (FOF 39-40).

Beneficial Use

FINDINGS OF FACT

- 45. The Applicant proposes to use the water for industrial use (dust abatement and hydrostatic testing) which is a beneficial use under the Montana Water Use Act.
- 46. No flow rate is requested because the dams are onstream, existing and impounding all water that flows into them. The flow rate from the reservoir by the tank trucks is 300 GPM which is within the typical range for the water tank trucks that will be used for these purposes.
- 47. The requested volume of 18.42 AF for dust abatement is based on the length and width of the construction right of way and access roads. The requested volume of 18.42 AF for hydrostatic testing is based on the length and diameter of the pipeline. The Applicants have requested overlapping water rights from multiple sources in order to ensure water availability in case some proposed sources become unavailable because of existing legal demands, sage grouse habitat timing and the ephemeral nature of water supplies in eastern Montana.

- 48. Under § 85-2-311(1)(d), MCA, an Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use.
- 49. An appropriator may appropriate water only for a beneficial use. <u>See also</u>, § 85-2-301 MCA. It is a fundamental premise of Montana water law that beneficial use is the basis, measure, and limit of the use. <u>E.g.</u>, <u>McDonald</u>, <u>supra</u>; <u>Toohey v. Campbell</u> (1900), 24 Mont. 13, 60 P. 396. The amount of water under a water right is limited to the amount of water necessary to sustain the beneficial use. <u>E.g.</u>, <u>Bitterroot River Protective Association v. Siebel</u>, *Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court,

Lewis and Clark County (2003), affirmed on other grounds, 2005 MT 60, 326 Mont. 241, 108 P.3d 518; In The Matter Of Application For Beneficial Water Use Permit No. 43C 30007297 by Dee Deaterly (DNRC Final Order), affirmed other grounds, Dee Deaterly v. DNRC et al, Cause No. 2007-186, Montana First Judicial District, Order Nunc Pro Tunc on Petition for Judicial Review (2009); Worden v. Alexander (1939), 108 Mont. 208, 90 P.2d 160; Allen v. Petrick (1924), 69 Mont. 373, 222 P. 451; In the Matter of Application for Beneficial Water Use Permit No. 41S-105823 by French (DNRC Final Order 2000).

Amount of water to be diverted must be shown precisely. <u>Sitz Ranch v. DNRC</u>, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 3 (citing <u>BRPA v. Siebel</u>, 2005 MT 60, and rejecting applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet).

- 50. It is the applicant's burden to produce the required evidence. <u>Sitz Ranch v. DNRC</u>, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7; *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC*., (DNRC Final Order 2005); <u>see also Royston; Ciotti</u>.
- 51. Applicant proposes to use water for industrial (dust abatement and hydrostatic testing) which are recognized beneficial uses. § 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence industrial is a beneficial use and that 36.84 AF of diverted volume of water requested is the amount needed to sustain the beneficial use. § 85-2-311(1)(d), MCA, (FOF 45-47)

Possessory Interest

FINDINGS OF FACT

52. The Applicant signed the affidavit on the application form affirming the Applicant has the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. This appropriation is specifically for dust abatement along the pipeline right-of-way and access roads and hydrostatic testing within the pipeline. No water can be used in the absence of right-of-way agreements which constitute written consent.

53. Pursuant to § 85-2-311(1)(e), MCA, an Applicant must prove by a preponderance of the evidence that it has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water under the permit.

54. Pursuant to ARM 36.12.1802:

- (1) An applicant or a representative shall sign the application affidavit to affirm the following:
- (a) the statements on the application and all information submitted with the application are true and correct and
- (b) except in cases of an instream flow application, or where the application is for sale, rental, distribution, or is a municipal use, or in any other context in which water is being supplied to another and it is clear that the ultimate user will not accept the supply without consenting to the use of water on the user's place of use, the applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest.
- (2) If a representative of the applicant signs the application form affidavit, the representative shall state the relationship of the representative to the applicant on the form, such as president of the corporation, and provide documentation that establishes the authority of the representative to sign the application, such as a copy of a power of attorney.
- (3) The department may require a copy of the written consent of the person having the possessory interest.
- 55. The Applicant has proven by a preponderance of the evidence that it has the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. § 85-2-311(1)(e), MCA. (FOF 52)

PRELIMINARY DETERMINATION

Subject to the terms, analysis, and conditions in this Order, the Department preliminarily determines that this Application for Temporary Beneficial Water Use Permit No. 39FJ 30150499 should be GRANTED and will expire on December 31, 2024.

The Department determines the Applicant may divert water from UT Buffalo Creek, by means of two dams, from January 1 through December 31 up to 36.84 AF, from a point in the SENENE and SENENW Sec. 16, T6N, R60E Fallon County, for industrial use (dust abatement and hydrostatic testing) from June 15 through December 31. The place of use is:

Table 5. Places of use for dust abatement

Township, Range, Section	Quarter Section	Township, Range, Section	Quarter Section	Township, Range, Section	Quarter Section
5 N 59 E 1	E2E2	6 N 60 E 19	ALL	7 N 60 E 23	SESE
5 N 60 E 6	W2W2	6 N 60 E 2	ALL	7 N 60 E 25	ALL
6 N 59 E 36	SESE	6 N 60 E 20	NWNW	7 N 60 E 26	ALL
6 N 60 E 1	W2NW	6 N 60 E 3	ALL	7 N 60 E 34	S2
6 N 60 E 10	NWNW	6 N 60 E 30	E2W2	7 N 60 E 35	ALL
6 N 60 E 16	N2N2	6 N 60 E 31	W2	7 N 60 E 36	ALL
6 N 60 E 17	ALL	6 N 60 E 4	N2SE	7 N 61 E 30	W2SW
6 N 60 E 18	SESE	6 N 60 E 9	ALL	7 N 61 E 31	ALL

Table 6. Places of use for hydrostatic testing

Township, Range, Section	Quarter Section	Township, Range, Section	Quarter Section	Township, Range, Section	Quarter Section
6 N 60 E 3	SW	1 N 60 E 31	E2SE	5 S 57 E 9	ALL
6 N 60 E 10	NWNW	1 S 60 E 4	ALL	5 S 57 E 8	SESE
6 N 60 E 9	ALL	1 S 60 E 5	S2	5 S 57 E 17	ALL
6 N 60 E 16	N2NW	1 S 60 E 8	W2	5 S 57 E 20	W2NW
6 N 60 E 17	ALL	1 S 60 E 7	E2SE	5 S 57 E 19	E2
6 N 60 E 20	NWNW	1 S 60 E 18	E2	5 S 57 E 30	ALL
6 N 60 E 19	ALL	1 S 60 E 19	ALL	5 S 56 E 25	E2
6 N 60 E 30	E2W2	1 S 59 E 24	SESE	5 S 56 E 36	ALL
6 N 60 E 31	W2	1 S 59 E 25	ALL	5 S 56 E 35	SESE
5 N 60 E 6	W2W2	1 S 59 E 26	SE	6 S 57 E 5	N2
5 N 60 E 7	W2W2	1 S 59 E 35	ALL	6 S 57 E 6	ALL
5 N 60 E 18	W2	1 S 59 E 34	SESE	6 S 57 E 7	W2
5 N 60 E 19	E2W2	2 S 59 E 2	W2	6 S 57 E 18	W2NW
5 N 60 E 30	E2W2	2 S 59 E 3	E2	6 S 56 E 13	E2
5 N 60 E 31	E2W2	2 S 59 E 10	ALL	6 S 56 E 24	ALL

4 N 60 E 3	W2E2	2 S 59 E 9	SESE	6 S 56 E 25	NW
4 N 60 E 10	W2E2	2 S 59 E 16	ALL	6 S 56 E 26	ALL
4 N 60 E 15	E2	2 S 59 E 21	N2NW	6 S 56 E 35	W2
4 N 60 E 23	W2W2	2 S 59 E 20	ALL	7 S 56 E 2	W2W2
4 N 60 E 22	E2NE	2 S 59 E 29	W2	7 S 56 E 3	E2
4 N 60 E 26	W2W2	2 S 59 E 30	S2	7 S 56 E 10	ALL
4 N 60 E 35	W2W2	2 S 58 E 36	E2	7 S 56 E 15	NWNW
3 N 60 E 2	W2W2	3 S 58 E 1	ALL	7 S 56 E 16	E2
3 N 60 E 11	W2W2	3 S 58 E 2	E2SE	7 S 56 E 21	ALL
3 N 60 E 14	NWNW	3 S 58 E 11	ALL	7 S 56 E 20	SE
3 N 60 E 15	E2E2	3 S 58 E 14	NWNW	7 S 56 E 29	N2
3 N 60 E 22	E2	3 S 58 E 15	E2	7 S 56 E 30	ALL
3 N 60 E 27	ALL	3 S 58 E 22	ALL	7 S 56 E 31	W2
3 N 60 E 34	E2W2	3 S 58 E 27	NWNW	8 S 56 E 6	W2W2
2 N 60 E 3	W2W2	3 S 58 E 28	ALL	8 S 56 E 7	W2W2
2 N 60 E 4	E2SE	3 S 58 E 33	NW	8 S 56 E 18	W2W2
2 N 60 E 10	W2W2	3 S 58 E 32	E2	8 S 56 E 19	W2W2
2 N 60 E 15	W2W2	4 S 58 E 5	ALL	8 S 56 E 30	NWNW
2 N 60 E 22	W2W2	4 S 58 E 6	E2SE	8 S 55 E 25	ALL
2 N 60 E 21	SESE	4 S 58 E 7	ALL	8 S 55 E 29	S2S2
2 N 60 E 28	E2	4 S 57 E 13	ALL	8 S 55 E 30	S2
2 N 60 E 33	ALL	4 S 58 E 18	NWNW	8 S 54 E 25	ALL
1 N 60 E 4	NW	4 S 57 E 24	W2	8 S 54 E 26	N2S2
1 N 60 E 5	E2	4 S 57 E 23	SE	8 S 54 E 27	S2
1 N 60 E 8	ALL	4 S 57 E 26	ALL	8 S 55 E 36	NW
1 N 60 E 17	E2W2	4 S 57 E 35	NWNW	8 S 55 E 35	S2N2
1 N 60 E 20	W2	4 S 57 E 34	ALL	8 S 55 E 34	S2N2
1 N 60 E 29	W2W2	5 S 57 E 3	NW	8 S 55 E 33	N2
1 N 60 E 32	W2W2	5 S 57 E 4	E2	8 S 55 E 32	NENE

NOTICE

This Department will provide public notice of this Application and the Department's Preliminary Determination to Grant pursuant to §§ 85-2-307, MCA. The Department will set a deadline for objections to this Application pursuant to §§ 85-2-307, and -308, MCA. If this Application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this Application as herein approved. If this Application receives a valid objection, the application and objection will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and § 85-2-309, MCA. If valid objections to an application are received and withdrawn with stipulated conditions and the department preliminarily determined to grant the permit or change in appropriation right, the department will grant the permit or change subject to conditions necessary to satisfy applicable criteria.

DATED this _____ day of _____ 2021.

/Original signed by Mark Elison/
Mark Elison, Manager
Billings Regional Office
Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the PRELIMI	NARY DETERM	<u>INATION TO</u>
GRANT was served upon all parties listed below on this _	day of	_ 2021, by first class
United States mail.		
DENBURY GREEN PIPELINE-MONTANA		
%RUSTY SHAW		
5320 LEGACY DRIVE		
PLANO, TX 75024		
RUSTY.SHAW@DENBURY.COM		
SWCA ENVIRONMENTAL CONSULTANTS		
%CHAD BARNES		
6500 BRIDGE WATER WAY #905		
PANAMA CITY BEACH, FL 32407		
CBARNES@SWCA.COM		
CHRISTINE SCHWEIGERT	DATE	